



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,002	11/30/2001	Michael Neal	DEM1P009	9261

22434 7590 02/26/2003  
BEYER WEAVER & THOMAS LLP  
P.O. BOX 778  
BERKELEY, CA 94704-0778

EXAMINER
----------

COSIMANO, EDWARD R

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/007,002

Applicant(s)

NEAL ET AL.

Examiner

Edward R. Cosimano

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-24 is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Applicant should note the changes to patent practice and procedure:
  - A) effective December 01, 1997 as published in the Federal Register, Vol 62, No. 197, Friday October 10, 1997; and
  - B) effective November 07, 2000 as published in the Federal Register, Vol 65, No. 54603, September 08, 2000.
2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. § 120/119(e) as follows:
  - A) The second application (which is called a continuing application) must be an application for a patent for an invention which is also disclosed in the first application (the parent or provisional application); the disclosure of the invention in the parent application and in the continuing application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. § 112. See *In re Ahlbrecht*, 168 USPQ 293 (CCPA 1971).
  - B) This application is claiming the benefit of a prior filed nonprovisional application under 35 U.S.C. § 120, § 121, or § 365(c). Copendency between the current application and the prior application is required.
  - C) An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification or in an application data sheet (37 CFR § 1.78(a)(2) and (a)(5)).
- 2.1 If applicant desires priority under 35 U.S.C. § 120/119(e) based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. \_\_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.
- 2.2 If the application is a utility or plant application filed on or after November 29, 2000, any claim for priority must be made during the pendency of the application and within the later

Art Unit: 3629

of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. See 37 CFR § 1.78(a)(2) and (a)(5). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. § 119(e), § 120, § 121 and § 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. § 119(e), § 120, § 121 and § 365(c). The petition must be accompanied by (1) a surcharge under 37 CFR § 1.17(t), and (2) a statement that the entire delay between the date the claim was due under 37 CFR § 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional. The petition should be directed to the Office of Petitions, Box DAC, Assistant Commissioner for Patents, Washington, DC 20231.

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 C.F.R. § 1.67(a) identifying this application by its Serial Number and filing date is required. See M.P.E.P. §§ 602.01 and 602.02.

3.1 The oath or declaration is defective because:

A) applicant is claiming the benefit of an earlier effective filing date under 35 U.S.C. § 120 and/or 35 U.S.C. § 365(c), however this claim fails to identify the application number of the document for which applicant is claiming this benefit.

4. The disclosure is objected to because of the following informalities:

A) applicant must update:

- (1) the continuing data on page 1, and
- (2) the application data on page 1,

with the current status of each of the referenced applications, e.g., --now abandoned--, or --now patent #?--, or --which is abandoned and now serial number #?--, etc.

B) as required by 37 CFR § 1.84(p(5)) and 37 CFR § 1.121(e) the specification lacks an explicit reference to the nature of:

- (1) reference legend(s):

(a) 200 of fig. 2 in the paragraph at page 8, lines 3-19, "To facilitate understanding, FIG. 7 ... may also be provided to optimization engine 112.";

(b) 212 & 216 of fig 2 in the paragraph between page 8, line 20, and page 9, line 8, "The financial model engine 108 ... 108 to optimization engine 112 (step 224).";

(c) the decision box entitled "CONTINUE OPTIMIZATION of fig. 2, note the paragraphs between page 8, line 3 and page 10, line 13, "To facilitate understanding, FIG. 7 ... so that a maximization of profit or another objective is achieved."; and

(d) 600 of fig 0 in the paragraph between page 21, line 13, and page 22, line 12, "FIG. 6 is a flow chart ... process is continued until all rules are feasible."; and

(2) how the program proceeds after box(es):

(a) how the flow chart of fig. 2 proceeds in the inquiry of the decision box entitled "CONTINUE OPTIMIZATION of fig. 2 is either "YES" or "NO", note the paragraphs between page 8, line 3 and page 10, line 13, "To facilitate understanding, FIG. 7 ... so that a maximization of profit or another objective is achieved.";;

In this regard, it is noted that merely mentioning a number with out mentioning the device or operation of the step relies on the drawing to provide support for the disclosure and not to aid in the understanding of the invention, as is the purpose of the drawings (37 CFR § 1.81(a,b)).

Appropriate correction is required.

5. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).

6. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

6.1 Claims 1-13 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

6.1.1 The instant claims recite a system/device, (claims 1-13), which has a practical application in the technological arts, and which does not merely define either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon. Hence, the instant claims merely define device that contains a series of steps that could be but are not necessarily to be performed on a computer.

6.1.2 It is further noted that applicant has not recited a specific machine since the operations recited in the claim are merely to illustrate the operations of the instant invention since these operations are not in fact implemented by a processor/computer. Hence, applicant envisions the invention as recited in claims 1-13 as a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure. Such a disembodied storage device is not a specific machine because:

A) it is not associated with a computer in such a way as to cause the computer to operate in a specific manner, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578); and

B) a memory alone can not perform the functions recited within the claims.

Therefore, the recited disembodied storage device, which itself can not perform the functions recited within the claims as the invention, is inoperative and lacks utility for the purpose of the invention.

6.1.3 In view of the above, the invention recited in claims 1-13, merely describes an abstract idea of a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure, since a disembodied storage device by itself can not produce a concrete and tangible result by performing the functions recited within the claims as the invention (State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596

Art Unit: 3629

(CAFC 1998)). Hence, claims 1-13 do not have a claimed practical application, since the disembodied storage device is inoperative and therefore lacks utility for the purpose of the invention.

6.1.4 Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. Cf. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability). Common situations involving nonfunctional descriptive material are:

- a computer that differs from the prior art solely with respect to nonfunctional descriptive material that cannot alter how the machine functions (i.e., the descriptive material does not reconfigure the computer), or

- a process that differs from the prior art only with respect to nonfunctional descriptive material that cannot alter how the process steps are to be performed to achieve the utility of the invention.

6.1.5 Hence, claims 1-13 are directed to non-statutory subject matter.

7. The following is an Examiner's Statement of Reasons for Allowance over the prior art:

A) the prior art, for example, either:

- (1) Yeoman, which discloses that the optimum price from a group of items may be less than the initial market price of the group of items.

- (2) Ouimet et al (WO 98/53415), which discloses that the profit for one or more items is a combination of prices and the psychological effect of promotion on demand models.

- (3) Fernandez et al (6,052,686), which discloses the initial values of subsets of a group affect the results when determining the optimum or lowest costs for the group.

- (4) Stevens (6,173,345), which discloses that a group may be optimized by examining subsets of the group.

B) however, the prior art does not teach or suggest:

Art Unit: 3629

(1) in regard to claims 1, 14 & 21-23, a method of optimizing the price of group of items by initializing the price of all of the items in the group and then optimizing the price of a selected subset of the entire group of items while maintaining the initial prices of the items of the group not contained in the selected subset of items. Claims 2-13 & 16-20 are allowable for the same reason.

(2) in regard to claim 24, a method of optimizing the price of group of items by initializing the price of all of the items in the group, optimizing the entire group of items and then optimizing the price of a selected subset of the entire group of items while maintaining the optimized prices of the items of the group not contained in the selected subset of items.

8. The shorten statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

9.1 The fax phone number for UNOFFICIAL/DRAFT FAXES is (703) 746-7240.

9.2 The fax phone number for OFFICIAL FAXES is (703) 305-7687.

9.3 The fax phone number for AFTER FINAL FAXES is (703) 308-3691.

02/23/03

  
Edward R. Cosimano  
Primary Examiner A.U. 3629